

Please replace the paragraph at page 1, lines 6-10 with the following paragraph:

---

**CROSSREFERENCE TO RELATED APPLICATIONS**

C1  
This application is a national phase entry under 35 U.S.C. § 371 of International Application Number PCT/US96/18807, filed November 21, 1996, and is a continuation-in-part of application serial No. 08/561,521, filed November 21, 1995, now U.S. Patent No. 5,840,299, which is a continuation-in-part of application serial. No. 08/186,269, filed January 25, 1994, now abandoned, and which is a continuation-in-part of PCT/US95/01219, filed January 25, 1994, now abandoned. The above-identified applications are hereby incorporated by reference in their entirety for all purposes.

---

**In the Drawings:**

Please substitute the attached Figures 1, 2, 10, and 11 for the corresponding Figures 1, 2, 10, and 11 filed on September 11, 1998.

**In the Claims:**

Please cancel claims 2-17 without prejudice of or disclaimer as to the subject matter contained therein.

Please replace claims 1, 18, and 19 as follows:

C2  
1. (Once Amended) A method of using a humanized antibody to alpha-4 integrin in the manufacture of a medicament for treating rheumatoid arthritis, wherein the humanized antibody is a humanized form of the mouse 21.6 antibody, wherein said humanized antibody comprises a humanized heavy chain and a humanized light chain:

(1) the humanized light chain comprising three complementarity determining regions (CDR1, CDR2 and CDR3) having amino acid sequences from the corresponding complementarity determining regions of the mouse 21-6 immunoglobulin light chain variable domain designated SEQ ID No:2, and a variable region framework from a human kappa light chain variable region framework sequence except in at least one

position selected from a first group consisting of L45, L49, L58 and L69, wherein the amino acid position is occupied by the same amino acid present in the equivalent position of the mouse 21-6 immunoglobulin light chain variable region framework; and

C2 (2) the humanized heavy chain comprising three complementarity determining regions (CDR1, CDR2 and CDR3) having amino acid sequences from the corresponding complementarity determining regions of the mouse 21-6 immunoglobulin heavy chain variable domain designated SEQ ID No:4, and a variable region framework from a human heavy chain variable region framework sequence except in at least one position selected from a second group consisting of H27, H28, H29, H30, H44, H71, wherein the amino acid position is occupied by the same amino acid present in the equivalent position of the mouse 21-6 immunoglobulin heavy chain variable region framework.

---

C3 18. (Once Amended) The method according to claim 1, wherein the humanized antibody specifically binds to alpha-4 integrin with a binding affinity having a lower limit of about  $10^7 \text{ M}^{-1}$  and an upper limit of about five-times the binding affinity of the mouse 21-6 immunoglobulin.

19. (Once Amended) The method according to claim 1, wherein the humanized light chain variable region framework is from an RE1 variable region framework sequence except in at least one position selected from the first group, and except in at least one position selected from a third group consisting of positions L104, L105 and L107, wherein the amino acid position is occupied by the same amino acid present in the equivalent position of a kappa light chain from a human immunoglobulin other than RE1.

---

Please add new claim 27 as follows:

---

27. (Newly Added) A method of treating rheumatoid arthritis comprising administering a humanized antibody to alpha-4 integrin, wherein the humanized antibody is a humanized form of the mouse 21.6 antibody, and wherein said humanized antibody comprises a humanized heavy chain and a humanized light chain:

(1) the humanized light chain comprising three complementarity determining regions (CDR1, CDR2 and CDR3) having amino acid sequences from the corresponding complementarity determining regions of the mouse 21-6 immunoglobulin light chain variable domain designated SEQ ID No:2, and a variable region framework from a human kappa light chain variable region framework sequence except in at least one position selected from a first group consisting of L45, L49, L58 and L69, wherein the amino acid position is occupied by the same amino acid present in the equivalent position of the mouse 21-6 immunoglobulin light chain variable region framework; and

(2) the humanized heavy chain comprising three complementarity determining regions (CDR1, CDR2 and CDR3) having amino acid sequences from the corresponding complementarity determining regions of the mouse 21-6 immunoglobulin heavy chain variable domain designated SEQ ID No:4, and a variable region framework from a human heavy chain variable region framework sequence except in at least one position selected from a second group consisting of H27, H28, H29, H30, H44, H71, wherein the amino acid position is occupied by the same amino acid present in the equivalent position of the mouse 21-6 immunoglobulin heavy chain variable region framework.

---